Monitor Corn Fields for Black Cutworms

Bryan Jensen, Integrated Pest Management program, Department of Entomology, UW-Madison

It is early. I get that. It is hard to predict what insects will do. Gosh, that is a lesson I learned a long time ago (and still get several reminders each year!). DATCP’s latest Wisconsin Pest Bulletin indicates some Wisconsin locations have had an intense flights while other locations a moderate flight. Certainly, those pheromone trap catches are a concern. Additionally, I am anxious about the timing between black cutworm damage and corn development. Seedling corn is most susceptible to black cutworm injury. By the time it reaches V5 the threat of economic damage is reduced if not eliminated.

The way spring planting season is shaping up, a significant portion of our corn acreage may be susceptible to black cutworm damage. That is not a prediction just a cause for concern. The only way to tell for sure is to monitor susceptible fields.

Sometimes it is the occasional insects, like black cutworms, that really catch us by surprise. We don’t routinely encounter them, and we don’t always think about them during our busy professional life.

This might be a year to keep a watchful eye out. Fields most likely to see damage, and where I would concentrate initial efforts, are those with early broadleaf weed growth, low lying areas within fields and or where there is significant soybean residue.

Do not assume that if you used an insecticide seed treatment and/or an above ground Bt trait you don’t have to be concerned. Not all above ground Bt traits provide “control” of black cutworms. Furthermore, both traited corn and seed treatments may not provide adequate control of large larvae.

Don’t consider using a foliar applied insecticide as a preventive treatment. The reasons not to are longer than I care to mention. Remember, we have had a long history
of controlling black cutworms with timely scouting and the use of insecticides if/only when needed.

It can be hard to put a “one size fits all” threshold on black cutworm damage. Typically, when 2-5% of the plants show cutting activity is a time to get concerned. That threshold range can be affected by price, crop stage and size of larvae.

Wisconsin Winter Wheat Disease, Spring Update

Damon Smith, Extension Field Crops Pathologist, Department of Plant Pathology, University of Wisconsin-Madison, Brian Mueller, Assistant Field Researcher, Department of Plant Pathology, University of Wisconsin-Madison

The Badger Crop Docs have been scouting winter wheat in southern and south-central portions of Wisconsin. Wheat is moving extremely slow. Growth stages are much behind compared to this time last season. I estimate that we are 2 weeks behind 2018. We have noted that stands are hit and miss from one field to the next in terms of quality of stand. It depends on when wheat was planted last fall and how much tillering was present before snowfall, coupled with the presence of ice under the snow over the winter. Overall things are starting to come around, but definitely a slow start to the spring in Wisconsin.

As for wheat diseases, things have been very quiet. This is good news! We did not have a stripe rust epidemic in 2018, in Wisconsin. Thus, there was no inoculum in the state to infect fall-sown wheat. So, the likelihood of any infection last fall is extremely low. This, coupled with extremely cold temperatures over the winter into 2019, mean that the odds of the stripe rust pathogen over-wintering is extremely low. The downside to this news is that stripe rust has been fairly active in the southern plains and deep south. Stripe rust reports are picking up in Texas, Oklahoma, and Kansas. This could mean that inoculum might be transported into the state later this season. Critical times to keep track of this are around the time that the flag leaf emerges and then again at anthesis. These growth stages are typical to apply fungicides, but only if the conditions are right for disease development and scouting reports indicate the need.

Fusarium head blight should also be on your radar. In 2018 we had a significant epidemic of Fusarium head blight (FHB or scab) that resulted in yield reductions and dockage at the elevator due to the production of vomitoxin by the fungus that causes FHB. We also had a significant amount of Gibberella ear rot which is caused by the same fungus that causes FHB in wheat. Thus, there is a significant amount of inoculum present in Wisconsin in 2019. We need to pay attention to the weather and what the FHB prediction model is telling us in terms of risk as we approach anthesis, later in the season.

Overall, winter wheat is not showing any disease issues right now. But continue to scout and track weather as we move through the season. Things can change rapidly and we will need to make some in-season disease management decisions as we move forward in 2019.

Managing Corn Insects When Growing Non-Bt Hybrids

Bryan Jensen, Department of Entomology, University of Wisconsin, Division of Extension

Several growers are making the switch to growing non-Bt corn hybrids. Several reasons are given which include a desire to save money on seed costs, historically low rootworm and European corn borer populations, rootworm resistance management and premiums paid for conventional corn.

From an entomological perspective, this is an interesting time to consider non-Bt hybrids. The above ground traits are essentially purchased as an insurance policy. At the time of seed purchase you do not know if you will get a return on investment from that trait (s). Hybrids with below ground traits can fit into an IPM plan. If you have beetle scouting data from the previous summer, you can decide if, or which, rootworm control method is most economical before purchasing seed.
Although there may be some apprehension when switching from the Bt traits, that concern can be alleviated with timely field scouting. Essentially, field scouting will eliminate the guess work and provide field-specific information from which to base your management decisions. Obviously, scouting will take time and information on the procedure is needed. We have prepared a document, *Managing Corn Insects When Growing Non-Bt Hybrids* in an effort to provide some background information. Most importantly several references are provided to make the transition effective and risk-free.

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**Links to Recent Wisconsin Pest Bulletins**

Krista Hamilton, Entomologist, Wisconsin Department of Agriculture, Trade and Consumer Protection

*Wisconsin Pest Bulletin, May 16, 2019*

*Wisconsin Pest Bulletin, May 9, 2019*

*Wisconsin Pest Bulletin, May 2, 2019*

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**Links to Recent UW-Madison Fruit Newsletters**

Christelle Guedot, Fruit Crop Entomology and Extension Specialist, Wisconsin-Madison Fruit Program

*WFN—Vol 4, Issue 3 (May 10, 2019)*

- NEWA new weather monitoring partnership
- Malusim app released
- Insect diagnostic lab update
- Controlling mites in berries
- Impact of rain on fungicides
- Blossom thinning

*WFN — Vol 4, Issue 2 (April 26, 2019)*

- New factsheets available
- Insect Diagnostic Lab update
- Managing Bees for Berries
- Cranberry degree days not available
- Grape Flea Beetle

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• San Jose scale on apple trees
• Pollen Tube Growth Model for thinning apple trees

The home website for the UW-Madison Fruit Program is [https://fruit.wisc.edu](https://fruit.wisc.edu)

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**Links to Recent UW-Madison Vegetable Crop Updates**

Amanda Gevens, Associate Professor & Extension Specialist, Potato & Vegetable Pathology, Plant Pathology Department

*Update 3 – May 12, 2019*

- vegetable production updates
- disease forecasting info and updates for potato

*Update 2 – April 28, 2019*

- Potato and vegetable planting updates
- Black heart of potato
- Managing early season disease in potato

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